

REMARKS

Following amendment as requested herein, the following claims are pending in the present application: Claims 12, 13, 15, 17–22, 28 and 30.

By the present amendment, Claims 26, 29 and 31 are cancelled without prejudice, in order to focus the present application on particular embodiments of the invention wherein adult (1–6 years) pets are fed an antioxidant-containing diet in order to provide benefits in their aged (7 or older) years. Applicant reserves the right to reintroduce claims to presently cancelled subject matter, for example in a later-filed continuation application.

Amendment of claims

Amendment of Claims 12, 28 and 30 is requested (a) to recite that the companion pet is canine or feline; (b) to replace the terms “aged” and “adult” with ranges of age consistent with definition of these terms in the specification at page 4, lines 14–16; (c) by minor rephrasing to further enhance clarity of these independent claims; and (d) to correct “lipoic acid” to “alpha-lipoic acid” in Claim 28. Support for the recitation of the group of canine and feline can be found in the specification as filed at least at page 4, lines 3–4.

Claims 14 and 16 are cancelled as they have become redundant with amendment of Claim 12, from which they formerly depended.

Amendment of Claims 13, 15 and 17–22 is requested to further enhance clarity of these claims, for example by correcting informally worded Markush groups (Claims 18 and 19) and by introducing greater consistency of wording elsewhere in the claims.

No new matter is introduced by the present amendment. No changes in inventorship result from the present amendment.

Claim rejections under 35 USC §102(a) over Milgram

Claims 12, 13 and 26 stand rejected under 35 U.S.C. §102(a) as being anticipated by Milgram *et al.* (internet abstract, 2000). With respect to Claim 26, this rejection is moot in the present application, following cancellation of Claim 26 by the above amendment. Rejection of Claims 12 and 13 under 35 U.S.C. §102(a) is respectfully traversed.

Applicant makes no admission herein that Milgram represents prior art with respect to the present invention, but even if Milgram were prior art it would fail to anticipate either one of

Claims 12 and 13. Specifically, Milgram discloses improvement of learning in aged dogs by administration of an antioxidant enriched diet to aged dogs. Young dogs fed the same enriched diet showed no such improvement. According to the present claims as herein amended, a method is provided for inhibiting onset of deterioration of mental capacity of aged (7 years or older) animals, by administration of antioxidants to the animals when they are 1–6 years old. In this regard it is noted that Applicant, in its submission dated September 19, 2003 (Paper No. 18), indicated willingness to consider amending Claim 12 by importing the limitation of Claim 14, but, as pointed out in the Office Action at page 3, fourth full paragraph: “There are no amendments of record in Paper No. 18.” By the present amendment, the previously contemplated recitation of 1 to 6 years has now been imported to all pending claims.

Claims 12 and 13 are therefore distinguished over Milgram. Withdrawal of the present rejection under 35 U.S.C. §102(a) is respectfully requested.

Claim rejections under 35 USC §103(a) over Hamilton

Claims 12–22, 26 and 28–31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hamilton (U.S. Patent No. 6,335,361). With respect to Claims 14, 16, 26, 29 and 31, this rejection is moot in the present application, following cancellation of these claims by the above amendment. Rejection of Claims 12, 13, 15, 17–22, 28 and 30 under 35 U.S.C. §103(a) is respectfully traversed.

Applicant makes no admission herein that Hamilton represents prior art with respect to the present invention. However, even if Hamilton were prior art, a *prima facie* case of obviousness of the present claims with respect to Hamilton cannot be sustained.

First, it is noted that, in considering differences between a prior art reference and the claimed invention, the prior art reference must be considered as a whole. MPEP §2141.02. The single paragraph at column 10, lines 9–13 of Hamilton, upon which it appears the Examiner has hitherto relied for the assertion that “Hamilton teaches administration of pet food formulations comprising a combination of α -lipoic acid, L-carnitine and vitamins C and E to improve mental acuity and to treat cognition disorders associated with aging” (Office Action, page 2, first full paragraph), must therefore be read in the full context of the entire Hamilton patent.

Hamilton’s bare mention of “pet formulations” or “a supplement for addition thereto” is in the context of administration of antioxidants such as α -lipoic acid in combination with

L-carnitine for prevention or amelioration of age-related cognitive deficits in older humans. No teaching is found in Hamilton of administration at an earlier stage in life as a means of inhibiting onset of age-related cognitive decline later in life. Such suggestion as exists in Hamilton appears to favor administration contemporaneously with such cognitive decline. See, for example, references to slowing or reversal of age-related dysfunction (*e.g.*, at column 7, lines 53–57), restoration of age-related mitochondrial function (*e.g.*, at column 8, lines 8–10), and recovery from brain injury (*e.g.*, at column 13, lines 19–25). By emphasis on treatment as opposed to prophylaxis (see also the claims of Hamilton), Hamilton even teaches away from the invention as presently claimed, wherein antioxidants are fed during years 1–6 of a pet's life to inhibit onset of mental deterioration in years 7 and later.

Second, it is well established that a *prima facie* case of obviousness fails unless all three of the criteria set forth in MPEP §2143 are met. A *prima facie* case of obviousness fails in the present instance at least because all claim limitations are not taught or suggested by the cited art. See MPEP §2143.03.

Specifically, there is no teaching or suggestion in Hamilton to feed antioxidants to a 1–6 year-old dog or cat (*i.e.*, a dog or cat not yet in its aged years). Absent such teaching or suggestion, the present rejection cannot be sustained against any of the claims as presently amended.

It is further noted that Hamilton's mention of pet [food] formulations and supplements is limited to a combination of carnitine and thioctic acid (α -lipoic acid), and optionally [coenzyme] Q10 and/or creatine. There is no teaching in Hamilton relevant to use of other antioxidants such as vitamin E for inhibiting age-related deterioration in mental capacity of dogs or cats, as contemplated, for example, in Claim 17.

Withdrawal of the present rejection under 35 U.S.C. §103(a) is therefore respectfully requested.

A number of references were cited in the present Office Action to “teach the role of the specific antioxidants vitamin C, vitamin E, α -lipoic acid and L-carnitine to inhibit the onset of deterioration of mental capacity, increase mental capacity to resist oxidative damage, inhibit the loss of learning ability and to increase the learning ability in both adult and aged companion pets.” Office Action, paragraph bridging pages 2–3. These references have not been applied in a

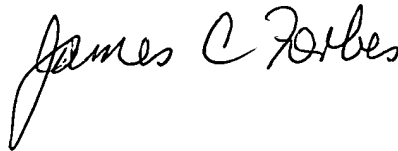
rejection; however, the Office Action goes on to state: "Both mice and rat laboratory models properly serve to illustrate efficacy in dogs and cats. It is noted claims 12, 26 and 28-31 are not limited to dogs and cats."

The present claims as amended herein specifically recite canine and feline companion pets. Applicant submits that, while mice and rat laboratory models can, in certain circumstances, give guidance on possible effects in other species, they do not properly serve to illustrate efficacy in dogs and cats as suggested by the Examiner. This is particularly true where, as in the present claims, particular age ranges are specified (1-6 years as the age range for feeding with an antioxidant-enriched diet; 7 years and older as the age range where benefits are realized).

Applicant believes the application is now in condition for allowance. Should any issues remain, the Examiner is invited to call the undersigned at the telephone number given below.

Respectfully submitted,

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Attachments

RCE request transmittal sheet
Fee transmittal sheet
Form PTO-1449
Cited art